

XIV. *On the Buprestidae from Madagascar.*

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[Read October 6th, 1880.]

RECENTLY M. James Thomson has published\* a paper on the *Buprestidae* from Madagascar usually included in the genus *Psiloptera*. He distributes the species known to him under eighteen subgenera, sixteen of which are new. Whether this is a desirable step or not is a matter of opinion, but for my own part I think it is to be regretted. In this paper I have placed the species under these various genera so far as is practicable, but not in the order given by M. Thomson, as he appears to have overlooked the relationship of the species with those from Africa. I think that there can be no doubt that whatever arrangement may be adopted for the Madagascar species, *Psiloptera albosparsa*, Fairm., should be placed in proximity to the African species; *Psiloptera sternalis*, Fairm., *Alampetis soror*, Thomson, following then in natural order. *Psiloptera analis*, Chev., is placed by M. Thomson under his genus *Cornelia* with *propyga*, Coq., with which it has little in common, and is separated by the genus *Pycnobothis*, Th. (with fifteen species), from *Cassidabothris colliciata*, Gory, to which it is undoubtedly most nearly allied.

*Pycnobothis*, Th., and *Coccinellopsis*, Th., must not be separated by *Cassidabothris*, Th.; in fact, *Coccinellopsis auropicta*, Gory, and *C. mystica*, Th., are closely allied to *Pycnobothis subsilphoides*, Th., *P. ruficauda*, Th., &c., agreeing both in general coloration and in having the prosternal process densely punctured and pilose in the males and smooth (or only sparingly punctured) in the females.

The new species described in this paper were chiefly collected by the Rev. W. Deans Cowan in the neighbourhood of Fianarantsoa; some by the Rev. C. Shaw, chiefly in the Ankafina Forest, N.E. of Fianarantsoa; a few were obtained by Mr. Kingdon east of Antananarivo;

\* Rev. et Mag. de Zool., 1878.

and lastly, some collected by the Rev. Robert Toy at Antananarivo. Of these correspondents Mr. Cowan only remains in Madagascar; Mr. Shaw and Mr. Kingdon have returned home. Mr. Toy, who laboured as Senior Tutor of the Theological and Secular College, after having resided in the island since 1862, at length broke down under his constant labours and the effects of the trying climate, and after a severe illness, from which he only partially recovered, he died on his passage home, south of Madeira, on the 19th of April of the present year.

Without enumerating all the species, I here give the following typical forms arranged in the order which appears to me to be the most natural:—

<i>Alampetis albosparsa</i> , Fairm.	<i>Coccinellopsis emarginata</i> , Gory.
" <i>soror</i> , Th.	<i>complanata</i> , Gory.
" <i>zivetta</i> , Klug.	<i>solea</i> , Klug.
<i>Apatea Luezotii</i> , Guérin.	<i>auropicta</i> , Gory.
<i>Amphis-beta navicularis</i> , Gory.	[ <i>Pyenobothris</i> ] <i>subsilphoides</i> , Th.
<i>Hemisobothris quadricollis</i> , Gory.	" <i>cuprifera</i> , Lap. & Gy.
<i>Laconides auroopilosa</i> , Guérin.	" <i>crassa</i> , Waterh.
<i>Palæobothris ochreata</i> , Oliv.	( <i>Coccinellopsis</i> ) <i>Klugii</i> , Gory.
<i>Phobetodes Goryi</i> , Guérin.	" <i>convexa</i> , Lap. & Gory.
<i>Enharpya amorphia</i> , Gory.	<i>Cassidabothris colliciata</i> , Gory.
<i>Carcinias scapularis</i> , Guérin.	" <i>analis</i> , Chev.
<i>Polybothris sumptuosa</i> , Gory.	<i>Cornelia pyropyga</i> , Coq.
<i>Erebodes Jansonii</i> , Th.	<i>Aplax obscura</i> , Th.
<i>Coccinellopsis Lafertei</i> , Gory.	<i>Icaria alata</i> , Gory.

In describing the following new species in the British Museum collection, I have placed them, to the best of my judgment, under the subgenera proposed by M. Thomson, but some of them are very difficult to locate:—

*Alampetis? scintillans*, n. sp.

Allied to *P. zivetta*, Klug, but much less convex, and in general outline somewhat resembling *P. impressipennis*. Thorax rather more narrowed in front than in *zivetta*, more distinctly keeled at the sides; deep olive-green, with only one raised median line, the disk rather sparingly punctured with large punctures; the impressed portion within the lateral margin is closely punctured nearly as in *zivetta*. The elytra somewhat resemble those of *impressipennis* in general outline, but the shoulders are a little expanded, and the lateral region from the shoulder to rather behind the middle is impressed, and the margin about the middle is slightly reflexed; the colour is more golden green and brighter than in *zivetta*,

and there is a little coppery tint at the apex; on the back there are a few dark purple spots, and a little way from the apex there is one on the margin: the apex is slightly truncate, and the outer tooth is seen with much difficulty. The sculpture is as follows: there is a prominent costa next the suture, which becomes obliterated some distance from the apex; next to this is a less elevated costa, which extends to the apex, but is frequently interrupted by round rugulose impressions; then there is a prominent costa which is obscure at the base, but which extends nearly to the apex; beyond these there are portions of two or three costæ, which are much interrupted by impressions; the surface beyond this is more flattened and is strongly punctured; close to the apex on the margin there is a small frosted golden impression filled with short pale pubescence, and there is a rather larger one a little above it still on the margin. The under side of the insect is æneous, tinted with coppery, with brassy punctuation; the prosternal process is not thickly punctured, it is grooved on each side; the abdomen is strongly marked with elongate punctures; the apical segment is blue, punctured with golden green, and with a narrow frosted margin of green. The reflexed portion of the elytra is shining blue, slightly concave, punctured posteriorly. Legs green.

Length 11 lines.

*Hab.*—Madagascar.

This species is difficult to locate, but I think it is best placed near *P. ziretta*.

*Amphisbeta impressipeunis*, L. & G., varieties.

1. The typical form of this species, according to a specimen compared with the type by Mr. Edward Saunders. Rather olive-æneous, with three brassy lines on the thorax, with a considerable amount of brassy frosted space on the elytra, especially below the shoulders and on the margin, and always with the sutural interstice brassy. One specimen in the Museum collection has almost the whole of the elytra taken up with the brassy colour.

This form occurs at Antananarivo.

2. Specimens from Fianarantsoa. More brown-æneous in general colour, and are rather smoother.

3. Specimens from Fianarantsoa. Uniform coppery

brown, smoother than is the case with No. 2, with no brassy lines on the thorax, and with the sutural interstice of the elytra also not brassy; &c.

4. A single specimen from Fianarantsoa resembling No. 3, but with the sides of the thorax much more coarsely punctured, and with no impression within the posterior angle.

5. A single specimen in Mr. Janson's collection, without particular locality, is entirely black above, but in other respects agrees with No. 3.

*Hemisobothris parallela*, n. sp.

Allied to *H. aureopilosa*, Guérin, but much narrower, more parallel, and with a patch of orange pubescence near the apex of each elytron, &c. Thorax strongly transverse, not quite so much narrowed behind as in *aureopilosa*, bluish black, shining, with the punctures and impressions brassy; the punctuation is strong, but not so close as in *aureopilosa*. The elytra are not broader than the thorax, parallel for three-quarters their length, and then areuately narrowed to the apex; bronzy-black, shining, with numerous irregular lines of strong punctures, much confused towards the apex, the interstices narrow, irregular, and costiform; the margin at the shoulder is brassy; at one-quarter from the base there is a brassy fascia, not reaching the suture, and a little behind the middle there is a similar fascia; these fasciae are more or less pubescent; there are also several small brassy, pubescent spots; a little way from the apex there is a large transverse spot, which is filled with orange pubescence. Nearly the whole of the under side of the insect (that is all the punctured portions) is brassy; the prosternal process (which is smooth and almost impunctate) and the middle of the metasternum are dark steel-blue; the abdomen is dark steel-blue, with the whole of the sides of the basal segment and two impressions at the side of each of the other segments frosted and brassy.

Length 12 lines.

*Hab.*—Antananarivo (Toy).

*Laconides aequalis*, n. sp.

Allied to *P. aureopilosa*, Guérin, but larger. It agrees in coloration with the general form of *P. aureopilosa*,

being golden green, tinted here and there with coppery, with blackish marks on the elytra; the under side is entirely bright green, with golden reflections. It differs from *aureopilosa* in having the thorax more coarsely punctured. The elytra are more convex, more attenuated and prolonged at the apex, a little more expanded at the shoulders; without any distinct round pubescent spots. The under flanks of the thorax are very coarsely punctured; the prosternal process is coarsely but not very thickly punctured. The intercoxal process of the abdomen is strongly punctured; the middle of the abdomen is nearly as much punctured as the rest.

Length 20 lines.

*Hab.*—Madagascar.

This species is clearly allied to *P. obtusa*, Lap. & Gory, but is differently coloured.

*Laconides chalybeorecentralis*, Thomson.

I have hitherto regarded this as a dark variety of *P. aureopilosa*, Guérin, and I think if it be separated as a species it will be necessary to consider the varieties of *P. impressipennis* above noticed as species also.

*Phobetodes vespertilio*, Thomson.

I have regarded this as a smooth variety of *P. Goryi*; the specimens from Antananarivo and Fianarantsoa recently received are, however, smoother on an average than those formerly received, and for which we have no precise locality.

*Enharpya chaotica*, Thomson.

The single specimen of this species in the Museum and one in Mr. Janson's collection are females; of *E. amorpha* there is only a single male in the Museum; so that, as M. Thomson does not mention the question of sexes in his description, I shall hold to my opinion that they are sexes of the same species. Great care is required in distinguishing the sexes of these insects.

*Carcinias spectralis*, Thomson.

I cannot distinguish this from *P. scapularis*, Guérin.

*Carcinius anulifer*, n. sp.

Allied to *C. scapularis*, Guérin, but larger, darker, more depressed, and with the subapical yellow patch on the elytra replaced by a streak of white pile. Head and thorax nearly black; the latter of the same form as in *scapularis*, and similarly sculptured, but the depressed portions are not brassy, scarcely tinted with purple. The elytra are black, with slight tints of purple here and there; less compressed below the shoulders, which are consequently less elevated; each elytron has three distinct but obtuse costæ, which do not reach the apex; the interstices are coarsely punctured, or rather wrinkled; there are some small impressed rings, and near the shoulders some impressions which are frosted and of a slight coppery colour, and filled with fine grey pile; the exterior apical portion is smooth. The under side of the insect is chiefly dark green, with dark coppery purple in parts; the prosternal process is smooth, shining, golden green; the metathoracic parapleura are closely and coarsely punctate-rugose. The abdomen is moderately, thickly, and very strongly punctured; there are no distinct white pubescent spots on the 2nd to 4th segments as in *scapularis*.

Length 22 lines.

Hab.—Antananarivo (Toy).

*Carcinias cœruleipes*, n. sp.

Allied to *P. scenica*, Gory, similarly coloured above, with broader thorax, with the elytra much less attenuated at the apex, and without the fulvous pubescent fascia near the apex; bright golden and green below, with coppery reflections, with blue legs. Thorax much less narrowed in front than in *scenica*, more arcuate at the sides; the sculpture above is somewhat similar, but there are no smooth spots on each side of the disk, as in *scenica*. The elytra are less deflexed at the sides, more parallel, only moderately attenuated at the apex, the shoulders less projecting; the sculpture is very similar; there are numerous small round spots scattered over the surface, those on the middle of each elytron are arranged in two oblique lines; these spots are coppery, and filled with fine whitish pubescence. The under side of the insect is very brilliant; the prosternal process is smooth, green. The metathoracic parapleura have a few obscure

punctures. The abdomen is obscurely punctured, except the apical segment, which is strongly punctured. The reflexed margin of the elytra is dull blue-black. The tarsi above are green.

Length 20 lines.

Hab.—Madagascar.

*Erebodes fulgidiventris*, n. sp.

Above coppery brown, the front of the head coppery, some portions of the interstices of the elytra blackish. Thorax with the surface uneven, distinctly impressed on each side, the impressions and the sides very rugose. Elytra rather smooth, the striae very imperfect, and not very much impressed; all the surface below the shoulders, a considerable portion of the sides, as well as some oblique, irregular rows of sub-confluent spots, frosted coppery brown, all these spaces filled with soft grey pubescence. All the under surface of the insect bright, shining, purple-tinted coppery, with a little golden green at the margins of the segments; the legs and the reflexed margins of the elytra golden green. Prosternal process almost impunctate.

Length 23 lines.

Hab.—Fianarantsoa (Shaw).

This species differs from *E. Jansonii*, Th., in having the elytra much less strongly striated, in its different colour, &c. From *E. Deyrollei*, Th., it differs in having the thorax impressed on each side, and in being more elongate.

*Coccinellopsis ? ? cibraria*, n. sp.

Depressed, elliptical, bronzy, the elevated parts æneous. Thorax transverse, moderately narrowed anteriorly, the sides nearly rectilinear; the medial channel is coppery; on each side of this the disk is smooth and shining æneous, and sparingly punctured; the sides are very uneven and rugose. The elytra immediately below the shoulders are rather more than one-third broader than the thorax, subparallel for two-thirds their length, then arcuately attenuated; almost the whole surface frosted and punctured; there are three or four interrupted narrow æneous costæ on the back; numerous small, round impressions are noticeable, particularly on the 2nd and 4th costæ; these spots are finely pilose; at

the apex the pubescence in the small impressions forms decumbent yellowish tufts. The under side is more shining bronzy than the upper side; the under margin of the elytra and some small irregular smooth spaces at the sides of the abdomen are deep blue; the prosternal process is sparingly punctured; the abdomen is strongly and thickly punctured; the apical segment is nearly semicircular, with the basal line, a medial line, and the margins thickly and finely punctured and brassy, the rest is smooth and dark blue, with a puncture here and there.

Length  $13\frac{1}{2}$ , breadth 7 lines.

*Hab.*—Madagascar.

This species stands quite alone; I know of nothing that approaches it, but its somewhat broad form induces me to place it with *Coccinellopsis*, although the abdomen is very different.

*Coccinellopsis Lafertei*, Gory.

The male of this species differs from the female in having the prosternal process densely and finely punctured and pilose. In the female this process is shining, and has numerous strong punctures scattered over the surface.

None of the immediately allied species known to me differ in this way. But *C. auropicta* and its allies, although far removed in other respects from *C. Lafertei*, agree with it in this difference in the sternal process in the sexes.

*Coccinellopsis lateralis*, n. sp.

Rather narrow, elliptical. Head and thorax aeneous; the latter having the medial channel and punctures brassy. The thorax resembles that of *P. complanata*, but is a little more arcuate at the sides, the surface is very uneven, very rugosely punctured at the sides; on each side of the medial channel there is a small, round, smooth spot, more clearly defined than that in *complanata*. Elytra not very broad and not much expanded at the sides, very convex on the back, with the margins flattened, rather straight at the sides for two-thirds their length, then arcuately narrowed; very strongly punctate-striate, brassy at the suture, passing through brownish coppery to dull purple; the margin dull, dark blue; the apex is truncate but not compressed, brown, the outer angle slightly dentiform. The under side is brassy; the pro-

sternal process is shining purple and smooth; the irregular smooth spaces at the sides of the abdomen are dark blue; there is some blue colour on the prosternum and flanks of the prothorax, and there is a small blue and purple spot on the episterna. The apical segment of the abdomen is smooth and shining, dark blue at the base, verging into purple and coppery towards the apex; the extreme apex is finely punctured and brassy. The under margin of the elytra is dark blue.

Length 10 lines.

*Hab.*—Fianarantsoa (Shaw).

Allied to *P. complanata*, but differently coloured and much narrower in the elytra; &c.

*Coccinellopsis punctiventris*, n. sp.

Resembles *P. lamina*, Klug, in general colour, form, and appearance, but with the elytra more narrowed posteriorly; and with the apical segment of the abdomen thickly and very strongly punctured, with only a small irregular smooth purple space on each side. Thorax aeneous, very strongly and not very thickly punctured, the medial channel very narrow in front; on each side of which there are three or four irregular ill-defined impressions, the outer ones as well as most of the punctures brassy. Elytra brassy, with the dorsal, convex, interstices tinted with brown, or coppery; the expanded margin, which is strongly punctured, has a somewhat round concavity some distance from the shoulder, extended inwardly by a brassy, frosted impression; a little behind the middle there are three frosted impressions (on the 2nd and 6th interstices) which are nearly confluent; at some distance from the apex there is a transverse frosted impression, extending from the second interstice to near the margin; the extreme apex is finely punctured and fringed with yellow hair; the external angle is not dentiform. The colour of the insect below is aeneous, tinted with brassy, the intercoxal process of the abdomen, some small irregular smooth spaces at the sides of the abdomen, and the posterior part of the under margin of the elytra, tinted with purple. The prosternal process has a slight medial impression; it is very sparingly punctured. ♂.

Length 11 lines.

*Hab.*—Madagascar.

*Coccinellopsis oralis*, n. sp.

Oval; brownish brassy above and below, with the under margins of the elytra blue-green, some irregular smooth spaces on the sides of the abdomen purple, the anal plate shining coppery purple. It is much narrower than *P. coccinella*, L. & G., and has the elytra with only a very narrow reflexed margin. In the form of the thorax and general coloration it resembles *P. chalcochrysea*, Klug, but the thorax is not margined laterally; the colour and sculpture are the same. The elytra, although much narrower than in *coccinella*, are much shorter and relatively broader than in *chalcochrysea*; the lines of punctures are even stronger than in the latter; there are numerous small round impressions on the alternate interstices, but there are no large lateral impressions; the apex is very slightly truncate, fringed with pale pubescence. The prosternal process is thickly and strongly punctured. The anal plate is nearly round, moderately large, the surface of the segment round it pubescent.

Length 7½ lines.

*Hab.*—Madagascar.

This species is perhaps best placed near *P. coccinella*.

*Coccinellopsis dejuncta*, n. sp.

Very close to *P. complanata*. It differs in being rather shorter, the thorax less narrowed in front, more rugose at the sides, with the medial channel broader and more defined. The elytra not so gradually narrowed behind; the apex is green and in part very finely punctured, fringed with yellow pubescence. The whole upper side is brownish aeneous. The under side is green mixed with purple and tinted with brassy; the smooth spaces at the sides of the abdomen are beautiful purple; the apical abdominal segment is purple, not very brilliant; its basal half is green and finely punctured, leaving the middle part smooth and purple, and in the punctured part on each side there is a small smooth space. The prosternal process is rather thickly and rather finely punctured, much more so than in *complanata* ♂. The under margin of the elytra is beautiful blue, tinted with green on the inner side.

Length 12 lines.

*Hab.*—Madagascar.

*Coccinellopsis multiguttata*, n. sp.

Allied to *P. complanata*, Guérin, but with the thorax less narrowed in front, the elytra straighter at the sides; the apical segment of the abdomen shining purple, with the basal half and a medial line densely punctured and golden. Thorax rather broad, brassy æneous, obliquely narrowed in front of the middle, sparingly but strongly punctured; the medial impression is moderately distinct; there is a small irregular smooth space on each side of the disk, and one on each side of the base; there is a slight impression within each posterior angle. Elytra not so prominent at the shoulders as in *complanata*, more parallel at the sides; dull olive-green, with brassy green margins, punctate-striate, the two or three dorsal striae strongly impressed; there are numerous small brassy spots on the sutural interstice; about six small quadrate spots on the 3rd interstice, several on the 5th, and about five on the 7th interstice; the apex is brassy, very little compressed, shining, partly frosted, fringed with yellow hair, the external angle not toothed. The under side of the insect is rather dark green, with golden punctures; the middle of the sterna, the intercoxal process of the abdomen, and a smooth irregular-shaped space on each side of the 2nd, 3rd, and 4th abdominal segments, purple. Prosternal process with a few large punctures. The under margin of the elytra dark blue.

Length 12 lines.

Hab.—Madagascar.

*Coccinellopsis elliptica*, n. sp.

Allied to *P. cassidoides*, Guérin, but narrower and more regularly elliptical, thorax smoother, and with the apical segment of the abdomen finely punctured along the base, closely and very strongly punctured in the middle, smooth on each side. Thorax dull purple-black, even above, the usual medial channel only represented by a small impression at the base; the punctuation is sparse and not very strong; the posterior angles are more closely and finely punctured, and are tinted with brassy. Elytra blue-black, not so much expanded as in *cassidoides*; there are four or five strongly impressed striae on the back, which are obscurely punctured; the margin near the shoulders is dull green; the extreme base and the suture near the base is brassy; and each elytron has

three strongly marked transverse, frosted, brassy impressions, somewhat similar to those in *cassidoides*, but extending to the margin. The apex is only slightly compressed, truncate, brassy, and pubescent. The under margins of the elytra are dark blue. The under side of the insect is coppery purple, shining, with the punctures and some frosted impressions on the sides of the abdominal segments brassy. Prosternal process with only a few punctures, but with a longitudinal medial impression extending to the front of the sternum. Femora purple, tibiæ brassy green, tarsi green.

Length 10 lines.

*Hab.*—Fianarantsoa (Cowan).

*Coccinellopsis propinqua*, n. sp.

Very close to *C. elliptica*, but differs in being uniform dull black above, slightly shining about the suture of the elytra; the posterior angles of the thorax are not brassy; the elytra have the impressions less marked and smaller; there is no brassy colour at the base. On the under side, the flanks of the thorax, the sternum, and the reflexed margins of the elytra are dark blue; the sides of the metasternum and the middle of the abdomen are more or less brassy, the legs are brassy green. The prosternal process has the same medial impression.

Length 9 lines.

*Hab.*—Antananarivo (Kingdon).

*Coccinellopsis sodalis*, n. sp.

Resembles *P. solea*, Klug, but without the oblique impressed line on each side of the thorax; with the shoulder of the elytra rather more square, i.e., less oblique, &c. Thorax dull black, or nearly black; rather sparingly punctured, the punctures strong in the middle, less so on the disk, stronger and more close at the sides, especially at a little distance from the anterior angles, where there is a slight constriction; the medial impression is broad and well marked posteriorly, but is narrow and indistinct in front. The elytra are very broad at the shoulders, only slightly narrower posteriorly till just at the apex, where they are then suddenly narrowed and compressed; dull blue-black, very strongly punctate-striate, the dorsal interstices convex; the basal

region is more or less æneous, and there are the following brassy impressions :—a large, shallow, ill-defined one on the margin near the shoulders; another similar one a little behind the middle; a third deeper one between the last-mentioned and the apex; and there are four small, round impressions on the 2nd interstice; all these impressions are frosted. The apex is frosted and furnished with yellow pubescence; the outer or lower angle has a strong tooth. The whole under side, including the margin of the elytra, is very dark blue, and is more or less dull; the prosternal process has numerous, large, strong punctures. The abdomen is very strongly and rather thickly punctured, the punctures frequently elongate, those in the intercoxal process particularly so; the apical segment is smooth and shining, with two or three punctures only at the basal angles.

Length 11 lines.

Hab.—Antananarivo (Kingdon).

*Coccinellopsis plagiata*, n. sp.

Allied to *P. solea*, Klug, but without the oblique brassy impressed line in front of the thorax, and having a large irregular frosted, brassy impression (sometimes filled with yellow tomentum) occupying the whole region of the posterior angle. Thorax very dark blue [sometimes inclined to purple, and sometimes tinted with green at the margins], shining on the disk, sparingly but very strongly punctured, scarcely constricted before the anterior angles; the medial impression narrowed anteriorly, green [or golden] in the middle. Elytra very dark blue, with strongly impressed dorsal striae; the apex suddenly narrowed and compressed; the apical impression brown and filled with yellow pubescence; each elytron has the following brassy, frosted impressions:—one on the margin below the shoulder, extending towards, but not reaching the suture; an irregular, somewhat broken one about the middle, nearly reaching the suture, but not the margin; a third one some distance from the apex, extending from the margin to near the suture; besides these, there are several small golden spots. The under side of the insect is bright brassy, tinted with pale green, strongly punctured; the sides of the prothorax are dull, pale green; the reflexed margins of the elytra are beautiful green

[sometimes blue, or inclined to blue posteriorly]; the prosternal process has a few strong punctures, [sometimes with a slight medial impression]; the apical segment of the abdomen is entirely smooth, blue-green. Legs green.

Length 10—11½ lines.

*Hab.*—Madagascar (Crossley); Fianarantsoa (Cowan).

The remarks in brackets refer to the specimens from Fianarantsoa.

*Coccinellopsis bistrigata*, n. sp.

Allied to *P. solea*, Klug, but smaller, with a more distinctly defined oblique impressed line on each side of the thorax; the prosternum with a medial longitudinal impression, &c. Thorax subparallel at the sides, suddenly narrowed (or perhaps rather constricted) in front, rather sparingly but strongly punctured; with the medial impression well marked and entire; there is an oblique, rather deeply impressed brassy line extending from the anterior angle to within a short distance of the medial channel; there is also a small impression within each posterior angle. The dorsal striae of the elytra are very strong, and the first two or three interstices convex; each elytron has the following impressions:—one at the extreme base; one on the margin below the shoulder; one a little behind the middle; and two between this and the apex; these last two rather more approximate than the others, but not running together, as is nearly the case in *P. solea*; there are also four or five small impressions on the 3rd interstice, and some very small dots on the sutural one; the apex is somewhat compressed, frosted, and pubescent, as in *solea*. The colour above, in one specimen, is obscure purple, the other specimens are black; the impressions are slightly brassy, and filled with white pubescence. The under side of the insect is coppery, more obscure and partly brassy at the sides, strongly punctured; the apical segment of the abdomen is smooth, except a narrow basal margin. The under margin of the elytra is dark blue. The legs are brassy.

Length 8—9 lines.

*Hab.*—Antananarivo (Kingdon).

*Coccinellopsis terminalis*, n. sp.

Allied to *P. auropicta*, Lap. & Gory, but with the general coloration of *P. complanata*. Brassy, the thorax

above and the under side of the insect in parts tinted with æneous, the raised interstices of the elytra more brown. Thorax as in *europicta*, but a little narrower, rather straight at the sides posteriorly, obliquely narrowed in front of the middle; the surface is uneven, moderately and thickly punctured, with a shallow medial impression, and an obscure oblique impressed line on each side in front. The elytra have numerous small round, brassy, frosted spots in lines on the alternate interstices, similar to those in *europicta*; and there is a large quadrangular frosted space on the margin, some distance from the shoulder, and a similar smaller one some way from the apex; the spaces are not round, as in *europicta*, and, not being on a black ground, they do not show so distinctly as in *europicta*; the apex is brown and fringed with yellow hair, the external angle distinctly dentiform. The prosternal process is purple in the middle, and has a medial impressed line, sparingly but strongly punctured. The abdomen has the middle of the intercoxal process and the irregular smooth spaces at the sides of the segments, purple; the apical segment is as if divided into three equal parts by two straight lines, which meet in the middle of the base of the segment, and diverge posteriorly; the middle portion is smooth, shining purple; the lateral portions are thickly punctured, brassy, and pubescent. The under margin of the elytra is dull æneous.

Length 11½ lines.

Hab.—Madagascar.

#### *Coccinellopsis europicta*, Lap. & Gory.

This well-known species in its typical form is rather dull, dark brassy below, with strongly sculptured elytra, with their apex gently prolonged. *C. quadrispilota*, L. & G., I am unable to distinguish from it. Of both these, there are in this Museum specimens compared with the original types by Mr. Edw. Saunders.

*C. Schænherri*, Chev., of which the type is in this Museum, is scarcely distinct; it has the same dark brassy coloration below, but the elytra are scarcely as much produced at the apex and the striae are more obsolete towards the margin.

*C. mystica*, Thomson, is like *Schænherri* above, but is more brilliant and green below. One of the Museum

specimens, however, from Fianarantsoa, approaches *Schænherri*, even in the colour below.

Mr. Thomson, at the end of his description of *C. mystica*, says:—"Espèce très originale et très facile à reconnaître. Elle est voisine de la *C. europicta*, Gory." Is this intended as a joke? for with a large series of specimens it is difficult to know where to draw the line between the two, especially as *C. Schænherri* is intermediate.

*Pycnobothis subsilphoides*, Thomson.

This species differs from *Coccinellopsis mystica*, Th., in being narrower in form, the elytra not being at all expanded at the sides, and by the black-blue colour of the under side.

*Pycnobothis compacta*, n. sp.

Closely resembles *P. subsilphoides*, Th., and is of the same form and size. It differs in being more or less tinted above with æneous, in having the elytra more roughly punctured, with the lines of punctures more distinct at the sides. It is the same dark blackish blue below, but the smooth space on the apical segment of the abdomen is more round; this space is shining bronze.

Length 8½—10 lines.

A single specimen, an obscure blackish brown variety, only measures 7 lines.

*Hab.*—Antananarivo (Kingdon & Toy).

*P. ruficauda*, Th., is a more elongate species than *P. compacta*, brighter in colour above; is beautiful purple below, at least in part; and has the elytra less rugose, and more regularly striate-punctate.

*Hab.*—Fianarantsoa (Cowan).

*Pycnobothis obscurella*, Th.

This species somewhat resembles *P. ruficauda*, Th., but it is very dark brownish black, faintly tinted with æneous, with more rugosely punctured thorax; more strongly sculptured elytra, which are acuminate at the apex and not truncated, and they are rather broader just before the posterior white spots than at their base. The anal plate is shining dark olive, a little elongate, narrowed towards the base, with a fringe of golden

pubescence round it, which is broad at its base and sides, but very narrow round the apex; the space on each side of this is finely punctured and brassy.

The under flanks of the prothorax are dull aeneous, with numerous large, deep punctures.

The prosternal process is sometimes channelled in the middle, sometimes nearly flat, and one example in this Museum has it slightly convex. This difference does not appear to be either sexual or specific. Some specimens have a few punctures in the middle of the process.

Length 8½—11 lines.

*Hab.*—Antananarivo (Kingdon).

*Pycnobothis truncatella*, n. sp.

Closely resembles *P. obscurella*, Th., in form and appearance. Obscure coppery brown, with thickly and strongly punctured thorax, and closely and strongly punctate-striate elytra. It is, however, at once distinguished by the elytra being a little truncate at their apex, the outer angle of the truncature slightly dentiform, and by the large lateral spots being round. The under side is almost entirely of an obscure coppery purple in the only example which I have seen. The anal segment resembles that in *obscurella*.

Length 9 lines.

*Hab.*—Antananarivo (Kingdon).

*Pycnobothis cuprifera*, Lap. & Gory.

This species is scarcely distinguishable above from *P. obscurella*, Th., but it appears always to want the very small brassy spot on the margin of the elytra, just before the apex, which exists in *obscurella*. Below it is easily separated by the apical segment of the abdomen; this has the anal plate very small, round (or slightly oval), surrounded by a ring of yellow pubescence, which is sunk below the surface of the plate itself; the margin beyond this is impunctate, shining, deep purple, raised, and somewhat thickened; the penultimate segment has its apical margin smooth. The prosternal process is moderately thickly punctured in the middle, longitudinally impressed in the middle. The under flanks of the prothorax are brassy and irregularly, and more finely punctured than in *P. obscurella*.

Length 9—11 lines.

*Hab.*—Fianarantsoa (Cowan).

*Note* :—In a series named by M. Thomson for Mr. Janson, one of the specimens named *P. obscurella* is *P. cuprifera*, and is from Fianarantsoa. It is only from the locality for *obscurella* being given as Antananarivo by M. Thomson that I am able to determine which is the true *obscurella*.

My authority for *P. cuprifera* is a specimen so named from La Ferté's collection, which agrees with Laporte and Gory's description, but as they do not describe the anal plate the determination is not satisfactory.

*Pycnophothris crassa*, n. sp.

Very near *P. obscurella*, Th., but shorter and broader, with more coarsely punctured elytra, and with brighter colour below. Thorax scarcely narrower than the elytra, closely and very coarsely punctured; brownish coppery, generally with a little æneous and brassy intermixed. Elytra gradually becoming a little wider from the shoulders to about two-thirds their length, then obliquely acuminate, simple at the apex; dark brown tinted with obscure purple, very strongly and closely punctate-striate; with two round spots, filled with pale yellow pubescence, on the margin of each elytron. The under side is shining green [sometimes tinted with coppery], with the sides of the body and margin of the elytra brownish; the apex of the femora, some spaces on the abdomen, and the anal plate are blue. The anal plate is round, or nearly so, relatively larger than in *P. cuprifera*, surrounded by a lightly impressed finely pubescent line; the apical margin is somewhat raised and a little thickened, coppery or purple, obscurely punctured. The prosternal process is longitudinally impressed in the middle, and has numerous strong punctures.

Length 6—8 lines.

*Hab.*—Antananarivo (Kingdon and Toy).